

# PATENT ABSTRACTS OF JAPAN

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## (54) EXPERT SYSTEM

### (57)Abstract:

**PURPOSE:** To always obtain appropriate compromise without unnecessary removing restriction by finding out a compromise plan by an evaluation value including satisfaction and using the plan as a solution when there is no solution completely satisfying restriction.

**CONSTITUTION:** Knowledge necessary for resolving an applied problem is stored in a knowledge base 1 as the type of a IF-THEN rule e.g., an inference means 5 forms a solution from the knowledge and restriction 2a to the formed solution is stored in a restriction storage device 2 together with its importance 2b as a group. When a value corresponding to the importance is applied to each restriction 2a as importance 2b, relative importance between respective restrictions 2a can be reflected, and since a resolution is found out without necessary removing restriction, an evaluation value for selecting a solution capable of much more satisfying the restriction is formed by a means for calculating the satisfaction of the whole restriction from the importance 2b of respective restrictions 2a. Consequently an excellent compromise plan satisfying its restriction as much as possible can be obtained.

